REMARKS

Claims 1-33 are pending and stand rejected under 35 U.S.C. § 103(a) over Hirooka, U.S. Patent No. 6,622,301, in view of Applicant's Admitted Prior Art ("AAPA"). Also, the drawings are objected to. Further, claims 15, 26 and 32 are objected to.

By this Amendment, Applicant amends the drawings, amends claims 7, 15, 26 and 32, and traverses the rejections of claims 1-33. Reconsideration is respectfully requested.

In paragraph 3 of the Office Action, the Examiner states that documents 1 and 5 as referred to in the specification have not been considered. However, the Examiner is requested to consider a non-English reference "in the same manner as consideration is indicated for information submitted in English" if a "concise explanation of the relevance" of the reference is provided. M.P.E.P. §§ 609 III C(2), III A(3). As to document 5, Applicant has set forth a "concise explanation of the relevance" of that document on page 24 of the specification. In view of the above, document 5 meets the requirements and Applicant respectfully requests that the enclosed form SB-08 be initialed accordingly.

In paragraph 4 of the Office Action, the drawings are objected to. Applicant has amended the drawings in accord with the Examiner's requirements. Approval of the drawings is respectfully requested.

In paragraphs 9 and 10 of the Office Action, claims 15, 26 and 32 are objected to. Applicant has amended claims 15, 26 and 32 in accordance with the Examiner's suggestions to correct minor typographical errors. Claim scope has not been narrowed thereby. Withdrawal of the objections to these claims is respectfully requested. Further, claim 7 has been amended to correct a clerical error. Specifically, in the previous response, the first word of claim 7 was inadvertently changed from "A" to "The". This amendment corrects that error. Claim scope has not been narrowed thereby.

AMENDMENTS TO THE DRAWINGS

In accord with the Examiner's request, please find attached replacement sheets for the drawings to replace the drawings submitted earlier which were of lesser quality.

In paragraph 13 of the Office Action, claims 1-33 are rejected under § 103 over Hirooka in view of AAPA. Applicant respectfully traverses for the following reasons.

The Office Action has failed to make out a *prima facie* case of obviousness of claim 1 because it has failed to show that Hirooka and AAPA, even if combined, show or suggest each claim limitation. M.P.E.P. § 2143. Claim 1 requires a "register allocation trial section", a "fork spot determination section" and an "instruction reordering section." Importantly, the fork spot determination section makes a determination "***based on*** a result" of the register allocation section, and the instruction reordering section makes a conversion "***based on*** a result" of the fork spot determination section (emphasis added). The Office Action has not shown that the latter two limitations (i.e., fork spot determination section, and instruction reordering section) are "based on" each of the respective "results."

Specifically, claim 1 requires that the fork spot determination section determines a result "***based on*** a result of the register allocation trial by said register allocation trial section." (Emphasis added.) The Office Action (at pages 7-8) finds this register allocation trial section in Hirooka, and (at pages 8-9) the fork spot section limitation in AAPA. But nowhere do AAPA or Hirooka show or suggest a fork spot determination section ***based on*** a result of the register allocation trial. Indeed, it would be impossible for the fork spot section purportedly found in ***AAPA*** to be *based on* a register allocation trial section purportedly found in ***Hirooka***, for these are two separate references. Even more, claim 1 requires that an instruction reordering section performs conversion "***based on*** a result of the determination by said fork spot determination section." This, too, is impossible because nowhere do AAPA or Hirooka show or suggest an instruction reordering section that is based on a result of a determination by a fork spot determination section, which, in turn, is based on a result of the register trial allocation section.

Each term in a claim is entitled to patentable weight, and all limitations as claimed must be found in the prior art. Here, the cited art fails to show or suggest an instruction reordering section that performs conversion based on a result of a fork spot

determination section, and fails to show or suggest a fork spot determination section that itself makes a determination based on a result of a register allocation trial section.

Moreover, the Office Action incorrectly states that Hirooka shows a "register allocation trial section." However, Hirooka cannot show such because it does not show using a register at all. At best, Hirooka shows a "shared memory parallel computer" (see Abstract) but does not show use of registers. In contrast, claim 1 of the present application requires "a ***register*** allocation trial section for trying ***register*** allocation prior to parallelization to estimate a ***register*** allocation situation. . . ." (Emphasis added.) For this added reason, each and every limitation of claim 1 is not found in the cited art and is thus patentable under § 103 over the cited art.

In view of the above, claim 1 is patentable under § 103 over the cited art. Withdrawal of the rejection of claim 1 is thus respectfully requested. Further, claims 2-6 depend directly or indirectly from claim 1 and contain additional patentable limitations therein in addition to those recited by claim 1. Accordingly, withdrawal of the rejections of claims 2-6 is thus respectfully requested.

Like claim 1, independent claims 7, 15 and 28 require that a fork spot determination section make a determination ***"based on*** a result" of the register allocation trial. (Emphasis added.) For the reasons given above with respect to claim 1, independent claims 7, 15 and 28 are patentable over the cited art. Accordingly, these claims are patentable under § 103 and withdrawal of the rejections of claims 7, 15 and 28 is thus respectfully requested. Further, claims 8-10 and 14, 16-27, and 29-33 depend directly or indirectly on independent claims 7, 15, and 28 respectively and contain additional patentable limitations in addition to those recited by said claims. Accordingly, these claims are patentable under § 103 and withdrawal of the rejections on these claims under § 103 is thus respectfully requested.

With respect to independent claim 11, nowhere do AAPA or Hirooka show or suggest, as required by claim 11, "a means for calculating a distance of data dependence . . . for the ***intermediate*** program." (Emphasis added.) Attempting to find this limitation

in the prior art, the Office Action states (see page 24) that Hirooka shows how to "improve data locality." However, Hirooka merely shows allocating "***source*** program 11" to various processors pe0-pe3, and is interested specifically in "data locality in the kernel loop." (Column 2, lines 60-66, emphasis added) Hirooka does not show or suggest calculating a distance of data dependence for an ***intermediate*** program, as required by claim 11.

In view of the above, the Office Action has failed to make out a *prima facie* case for the obviousness of claim 11 because each and every limitation is not found in the cited art. Withdrawal of the rejection of claim 11 under § 103 is thus respectfully requested. Claims 12-13 depend on claim 11 and contain additional patentable limitations in addition to those recited by claim 11. Withdrawal of the rejections of claims 12-13 under § 103 is thus respectfully requested.

In summary, Applicant has shown that documents 1 and 5 are in conformance with the requirements for disclosure in an IDS and should be initialed accordingly. Further, Applicant has amended the drawings and claims in accord with the Examiner's suggestions. Finally, Applicant has shown that claims 1-33 are patentable under § 103 over the cited art. In view of the above amendment, Applicant believes that each of the claims in the pending application is in condition for allowance.

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Respectfully submitted,

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Attachments